

TRENDS AND SUBGROUP COMPARISONS IN CURRENT TOBACCO USE

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Acknowledgements

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Four Major Surveillance System from MSDH

- 1) YTS: Youth Tobacco Survey
- 2) YRBSS: Youth Risk Behavior Surveillance System
- 3) PRAMS: Pregnancy Risk Assessment Monitoring System
- 4) BRFSS: Behavioral Risk Factor Surveillance System

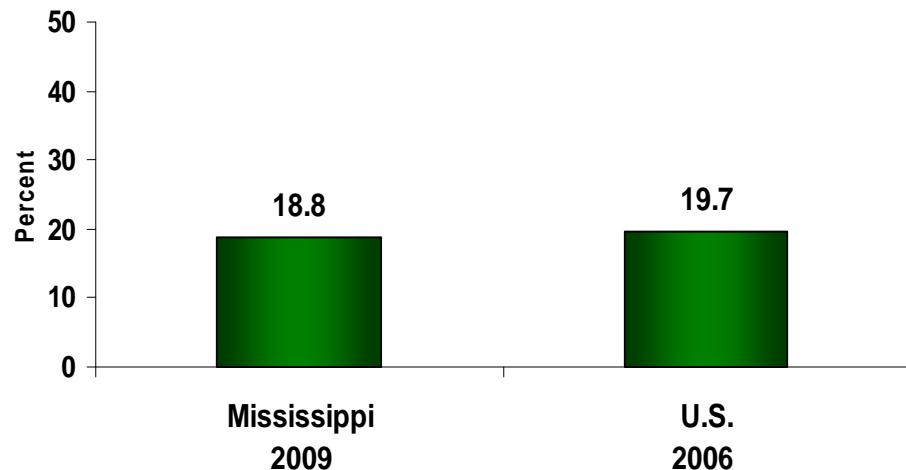
TOBACCO USE AMONG ADOLESCENTS

-- Data from YTS



Current Cigarette Use – National Comparison

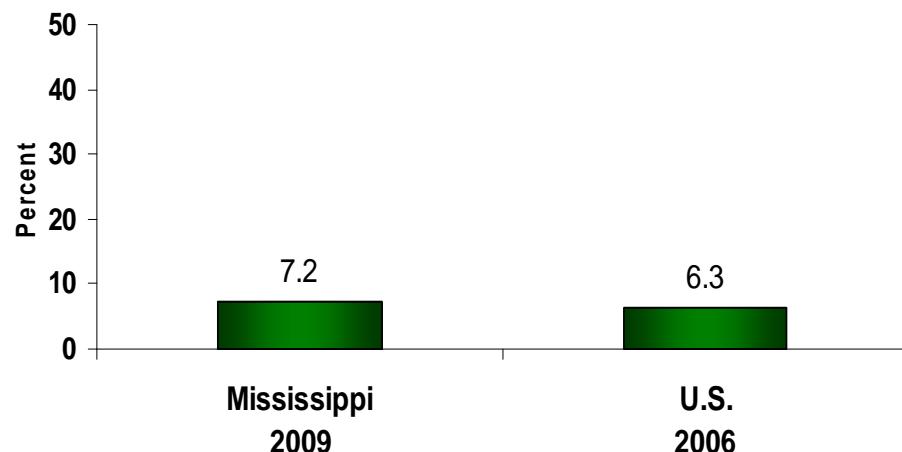
Public high school



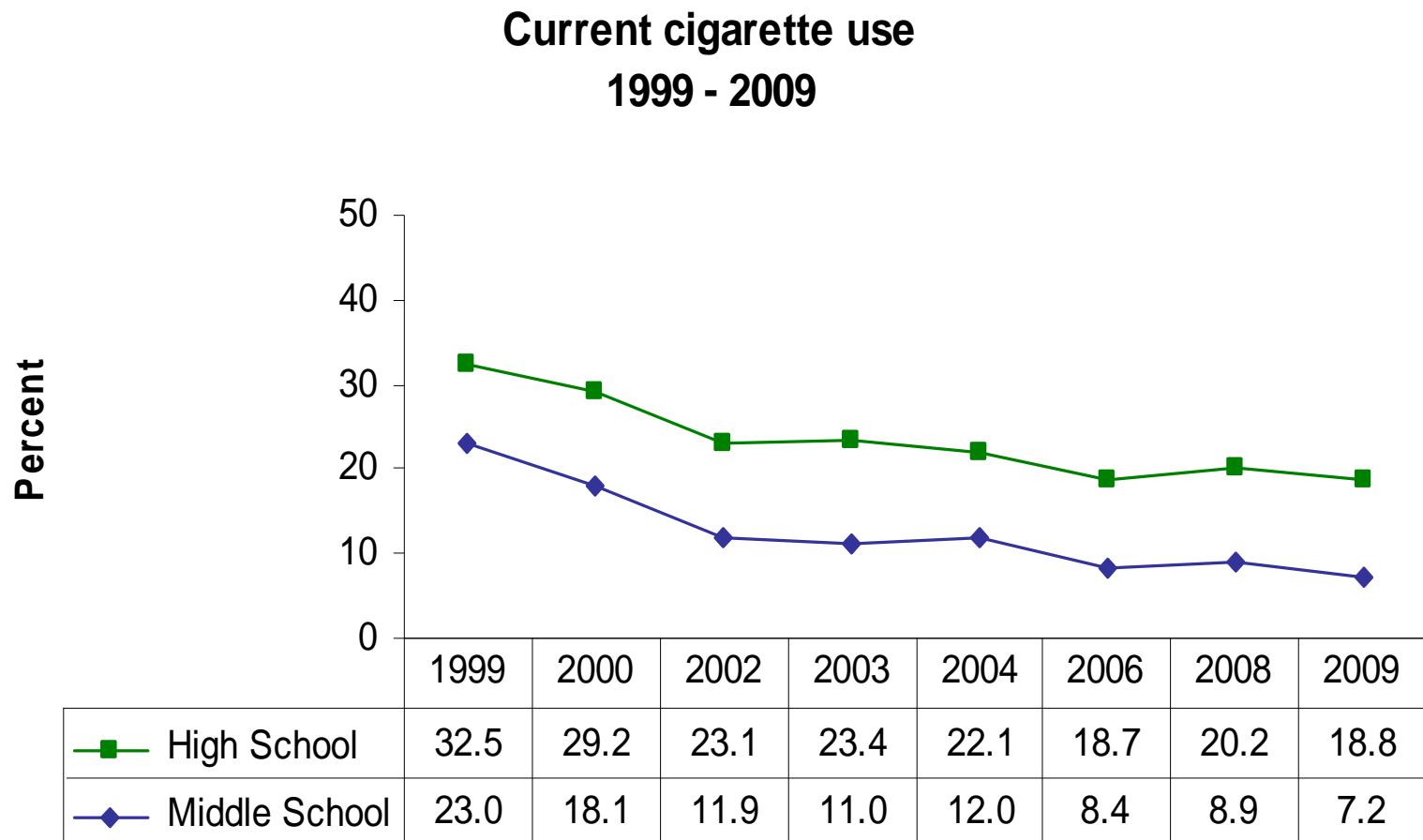
Based on the 2009 YRBS, Mississippi ranked 15th among the 42 states that participated in the survey.

- Kentucky – 26.1% (highest)
- Utah – 8.5% (lowest)

Public middle school



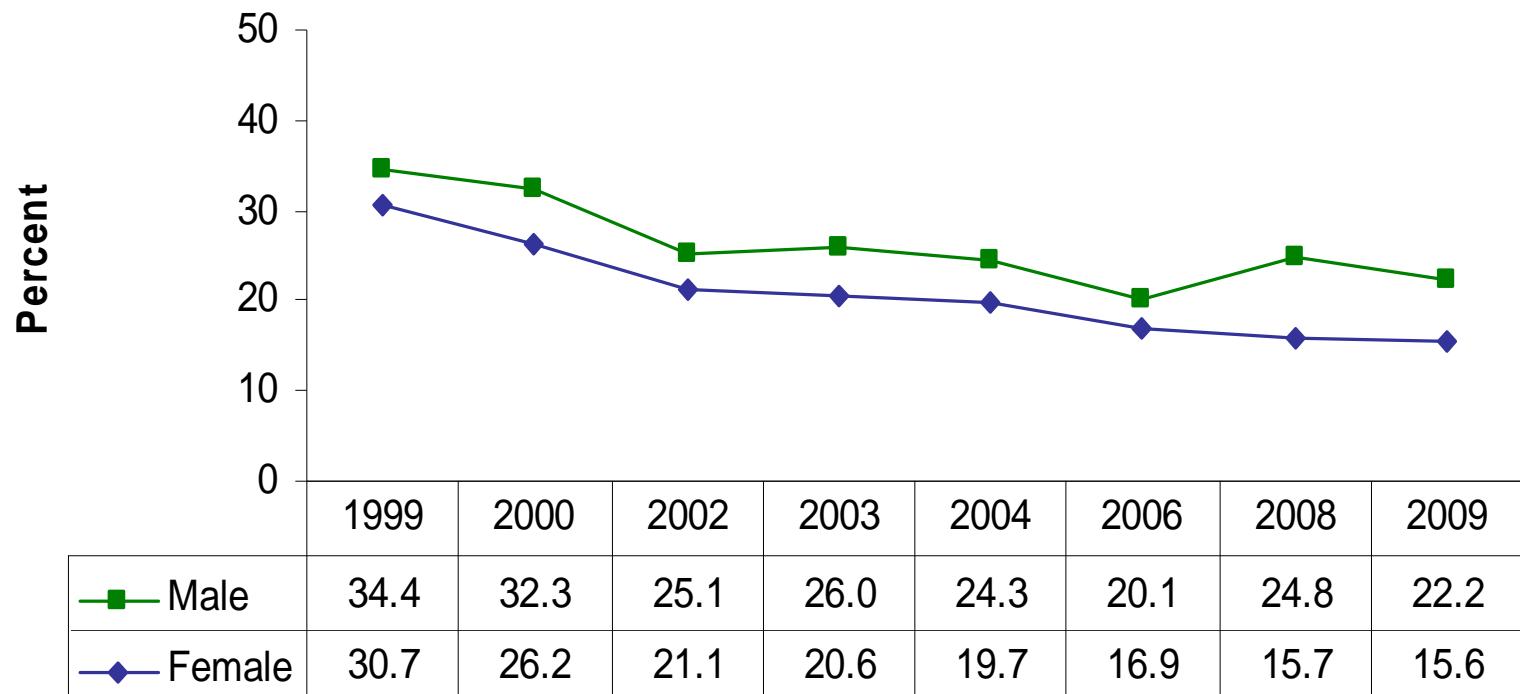
Current Cigarette Use in High and Middle School—MS



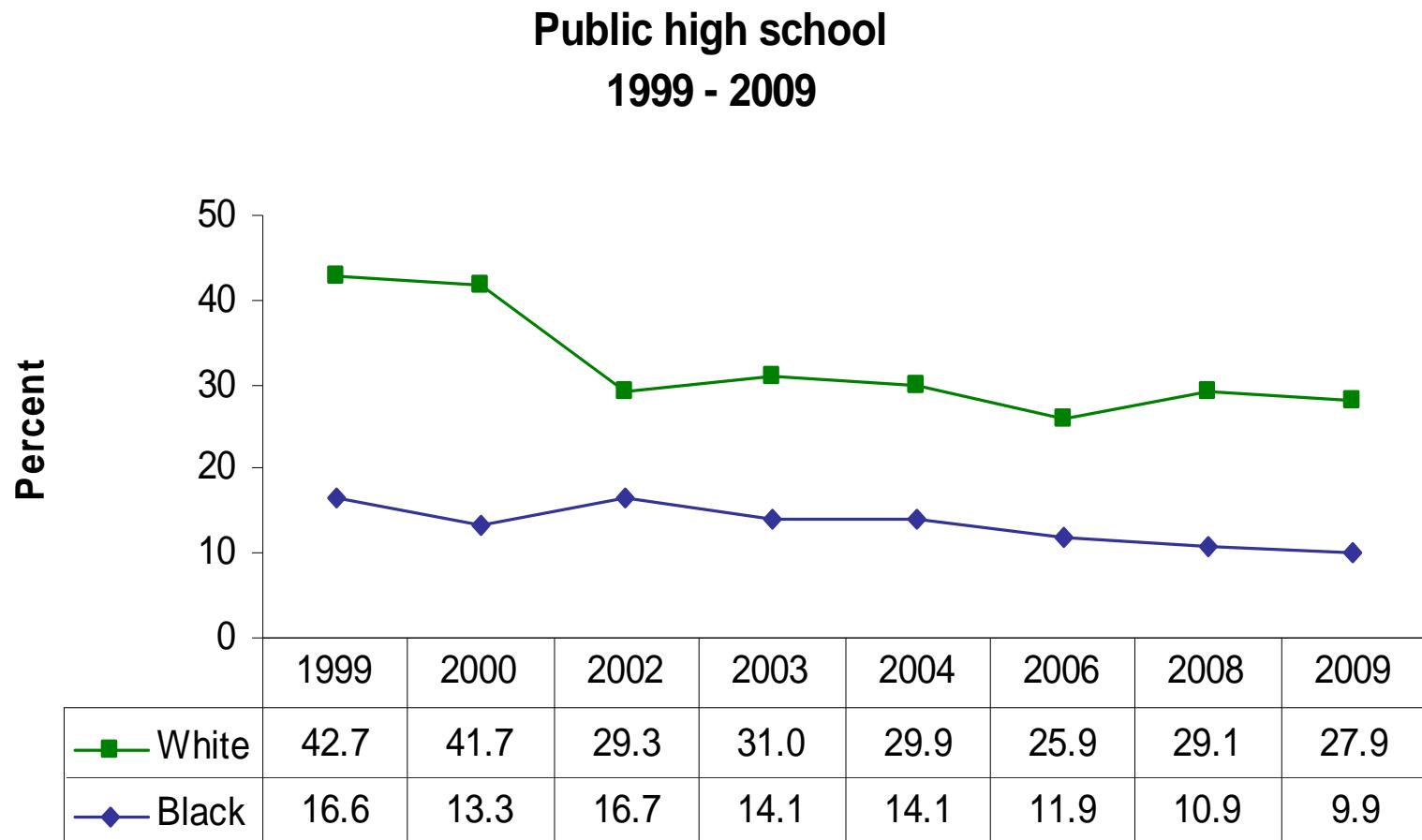
Healthy People 2010 Goal for Adolescents: no more than 16%



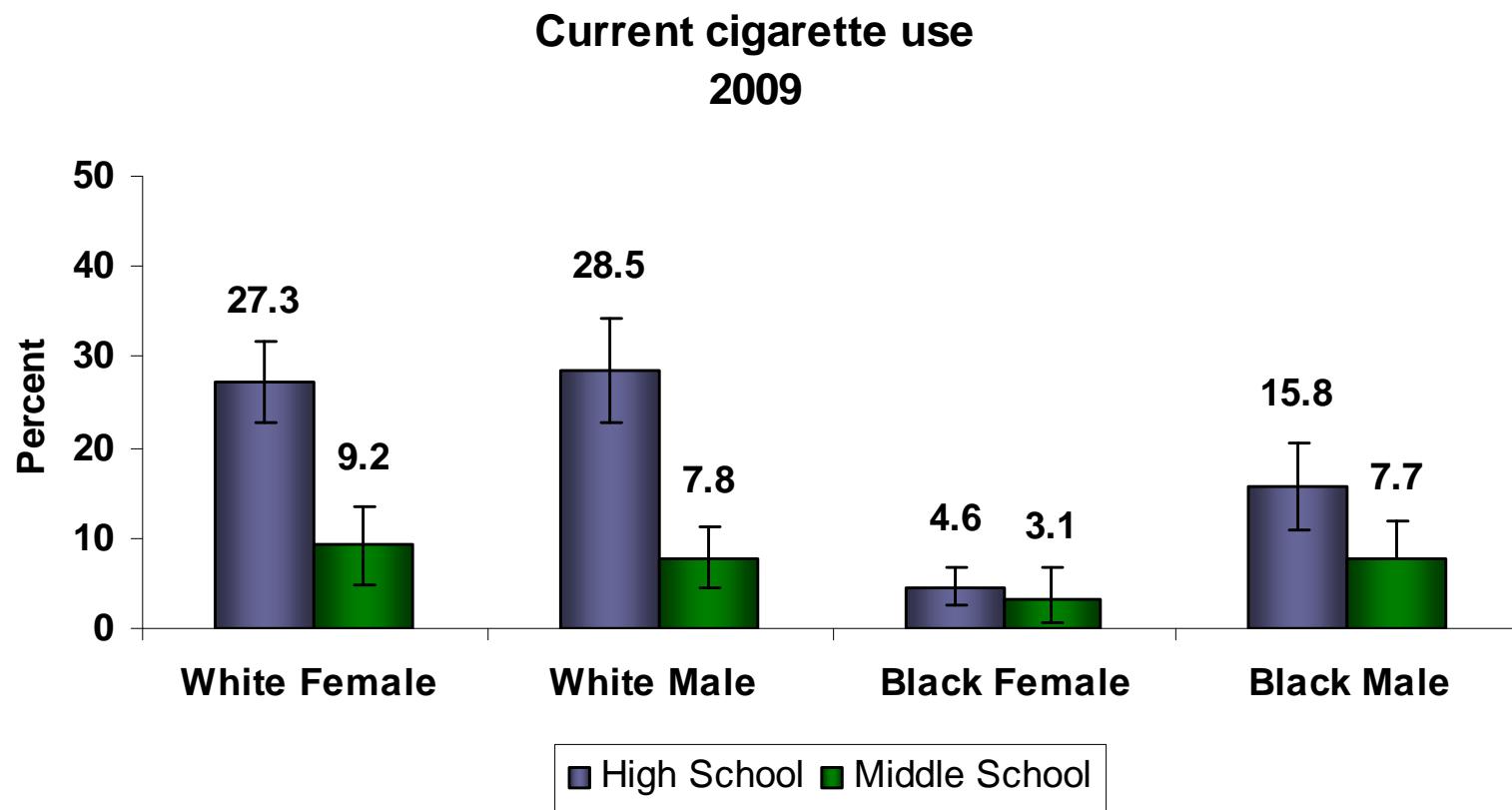
Current Cigarette Use by Sex — Mississippi

**Public high school
1999 - 2009**

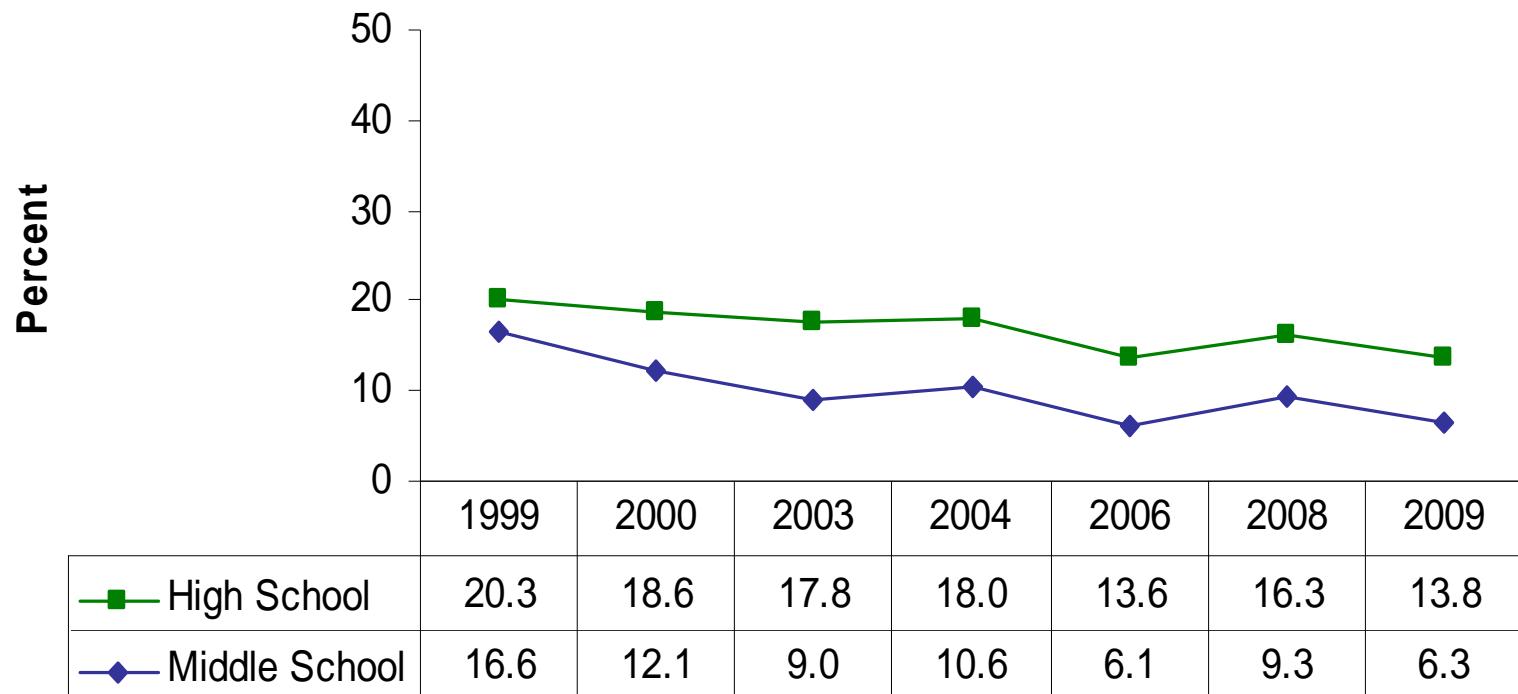
Current Cigarette Use by Race — Mississippi



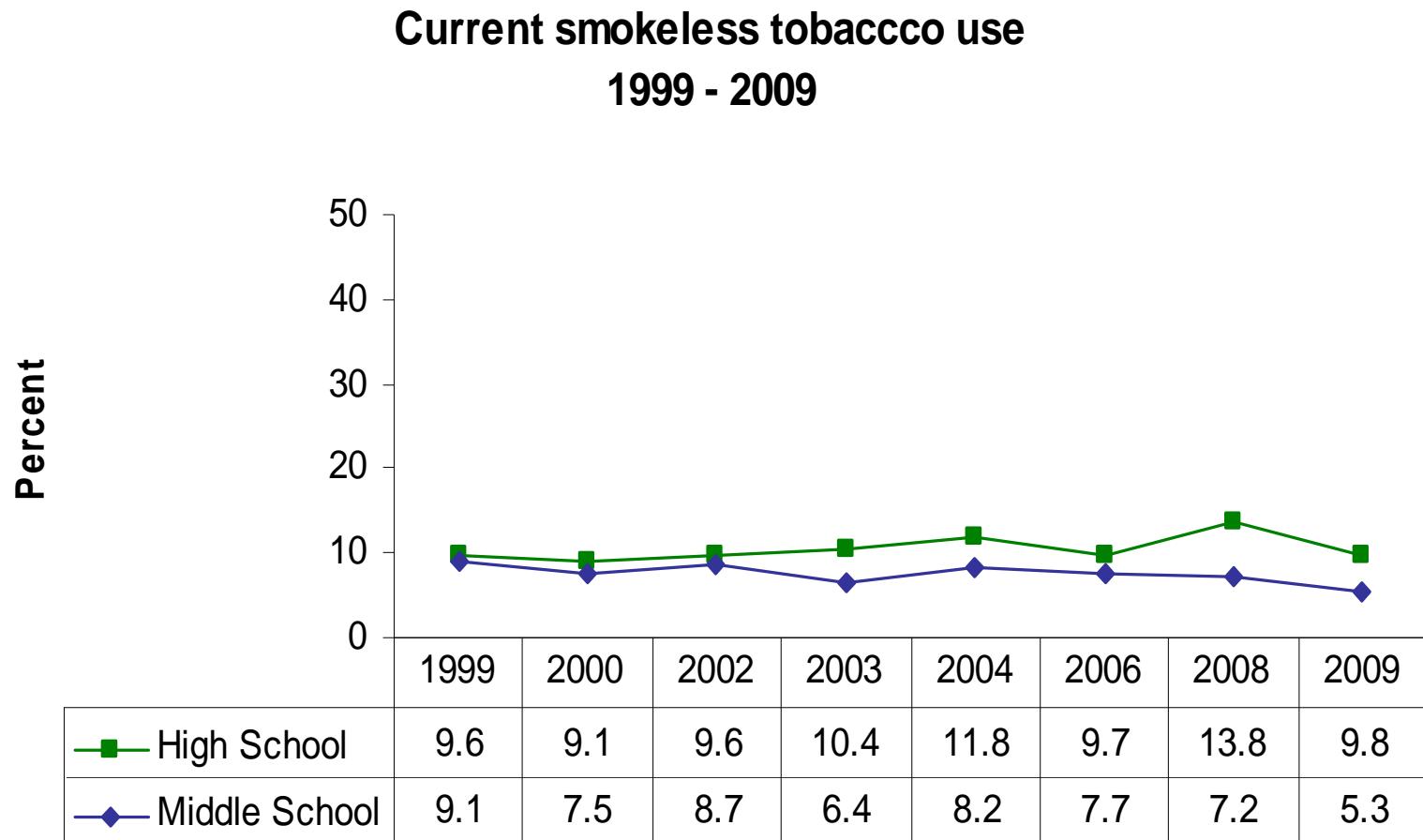
Current Cigarette Use by Race and Sex – MS



Current Cigar Use – Mississippi

**Current cigar use
1999 - 2009**

Current Smokeless Tobacco Use — Mississippi



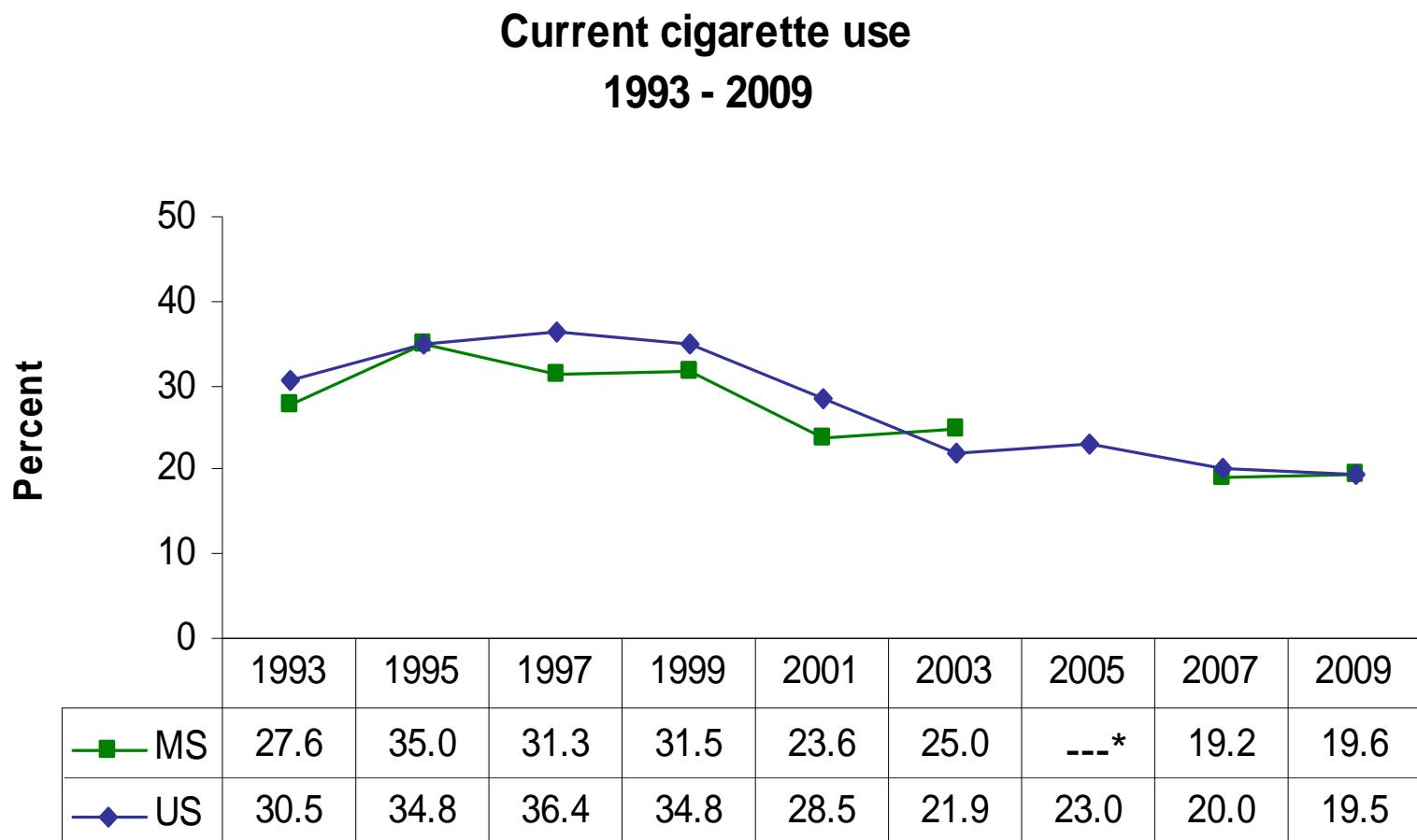
TOBACCO USE AMONG ADOLESCENTS

TOBACCO USE AMONG ADOLESCENTS

-- Data from YRBSS



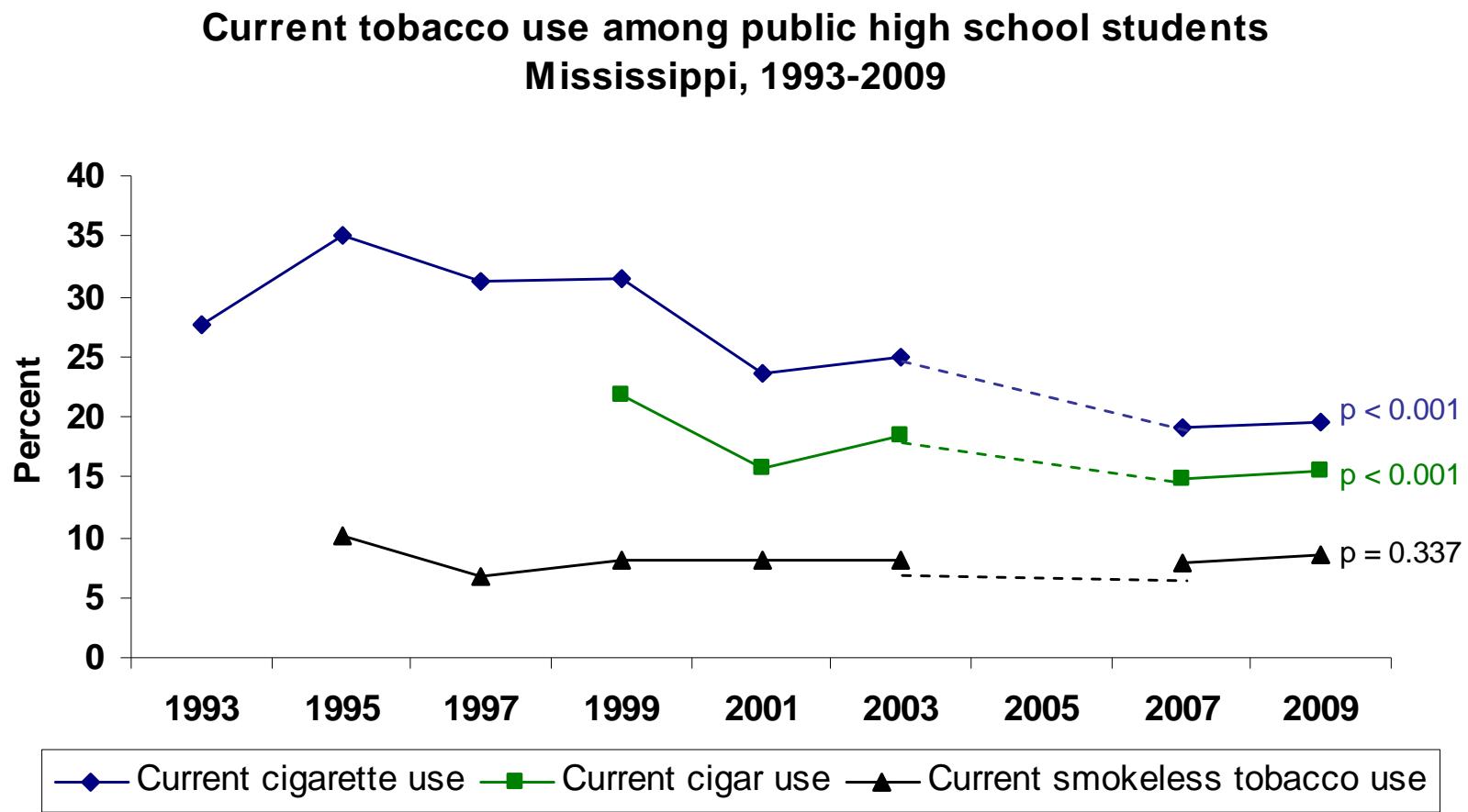
Current Cigarette Use – MS vs. US



*2005 Mississippi data were not weighted.



Trend Analysis



2009 Current cigarette users – White/Non-Hispanic

| | Odds ratio | Lower 95% confidence limit | Upper 95% confidence limit |
|------------------------|-------------|-------------------------------|-------------------------------|
| Sex | | | |
| Male | 0.96 | 0.85 | 1.1 |
| Female | Referent | Referent | Referent |
| Grade | | | |
| 9th | Referent | Referent | Referent |
| 10th | 0.94 | 0.78 | 1.14 |
| 11th | 1.00 | 0.82 | 1.23 |
| 12th | 1.24 | 1.02 | 1.50 |



2009 Current cigarette users – Black /Non-Hispanic

| | Odds ratio | Lower 95% confidence limit | Upper 95% confidence limit |
|------------------------|-------------|-------------------------------|-------------------------------|
| Sex | | | |
| Male | 2.40 | 2.04 | 2.82 |
| Female | Referent | Referent | Referent |
| Grade | | | |
| 9th | Referent | Referent | Referent |
| 10th | 0.90 | 0.71 | 1.14 |
| 11th | 0.92 | 0.71 | 1.19 |
| 12th | 1.12 | 0.93 | 1.35 |

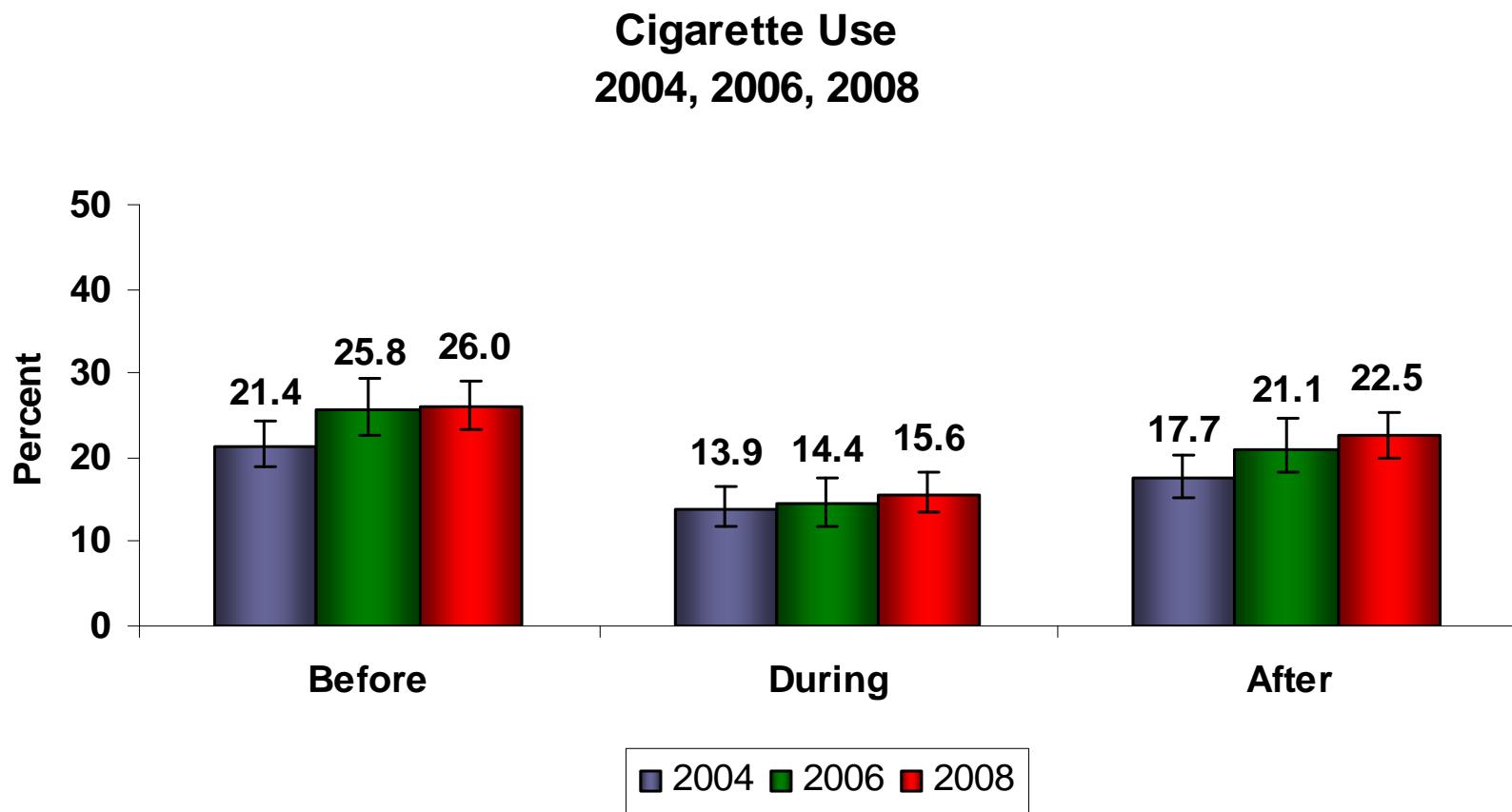


TOBACCO USE AMONG REPRODUCTIVE AGE WOMEN

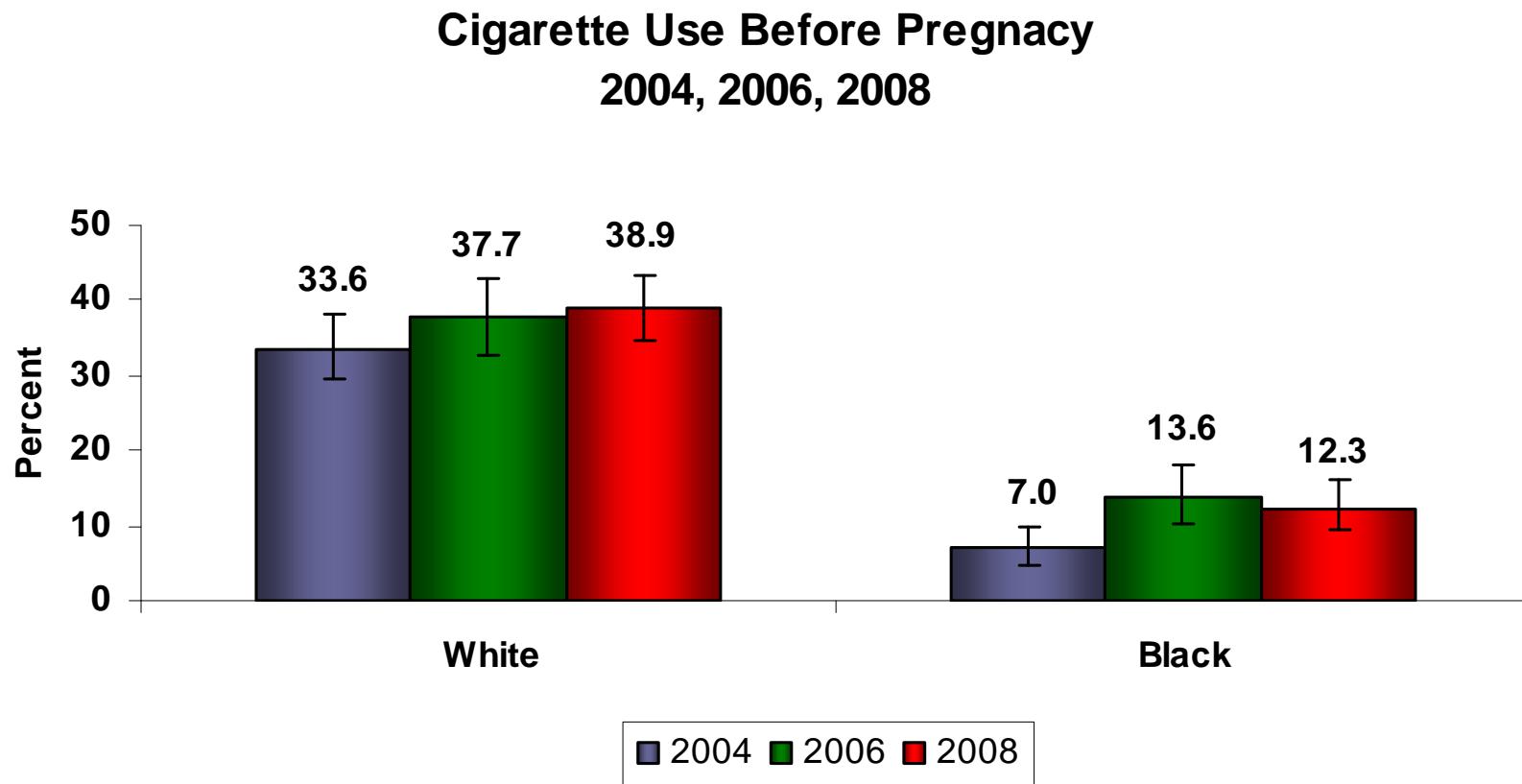
-- Data from PRAMS



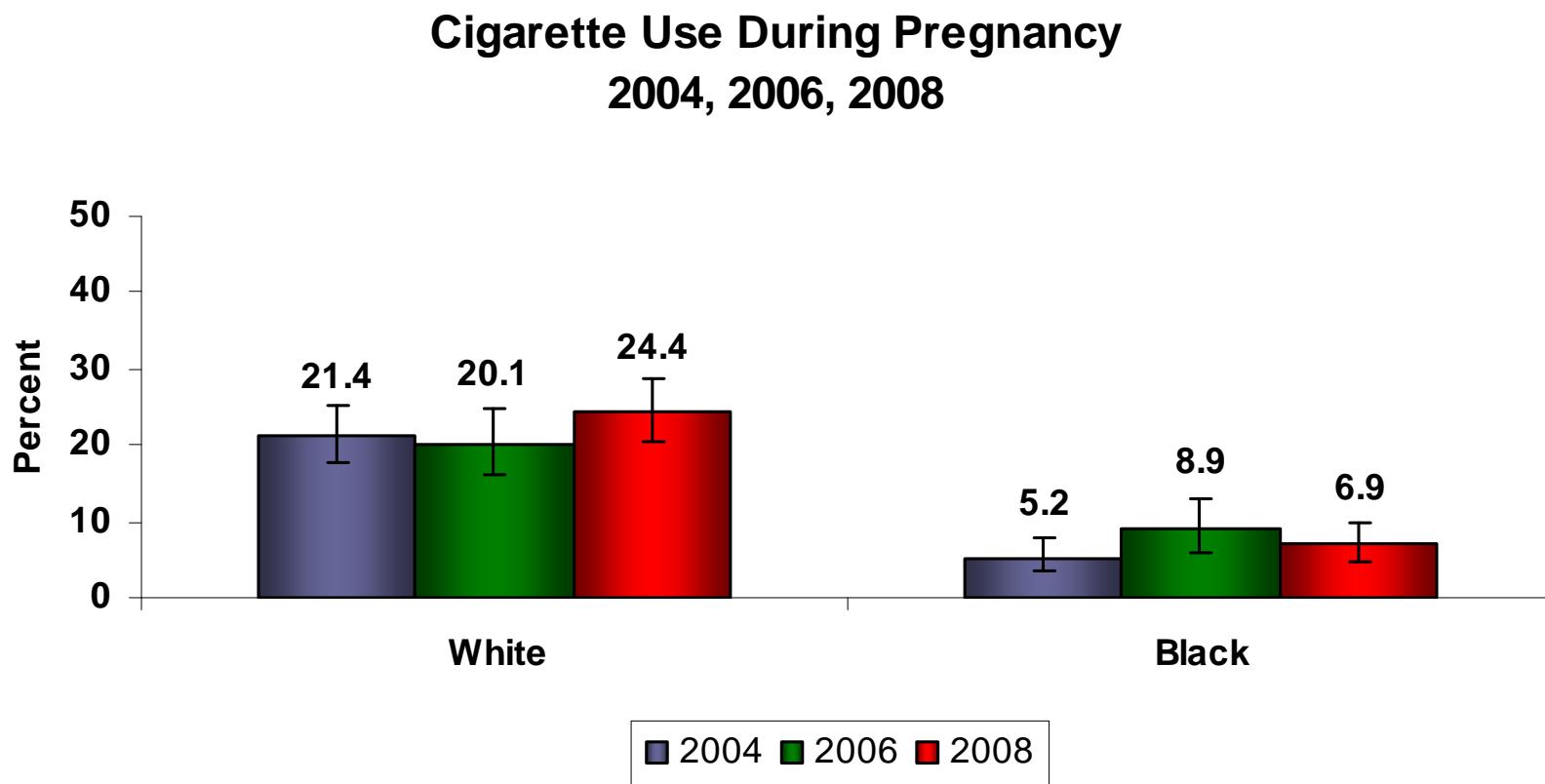
Cigarette Use among Pregnant Women – MS



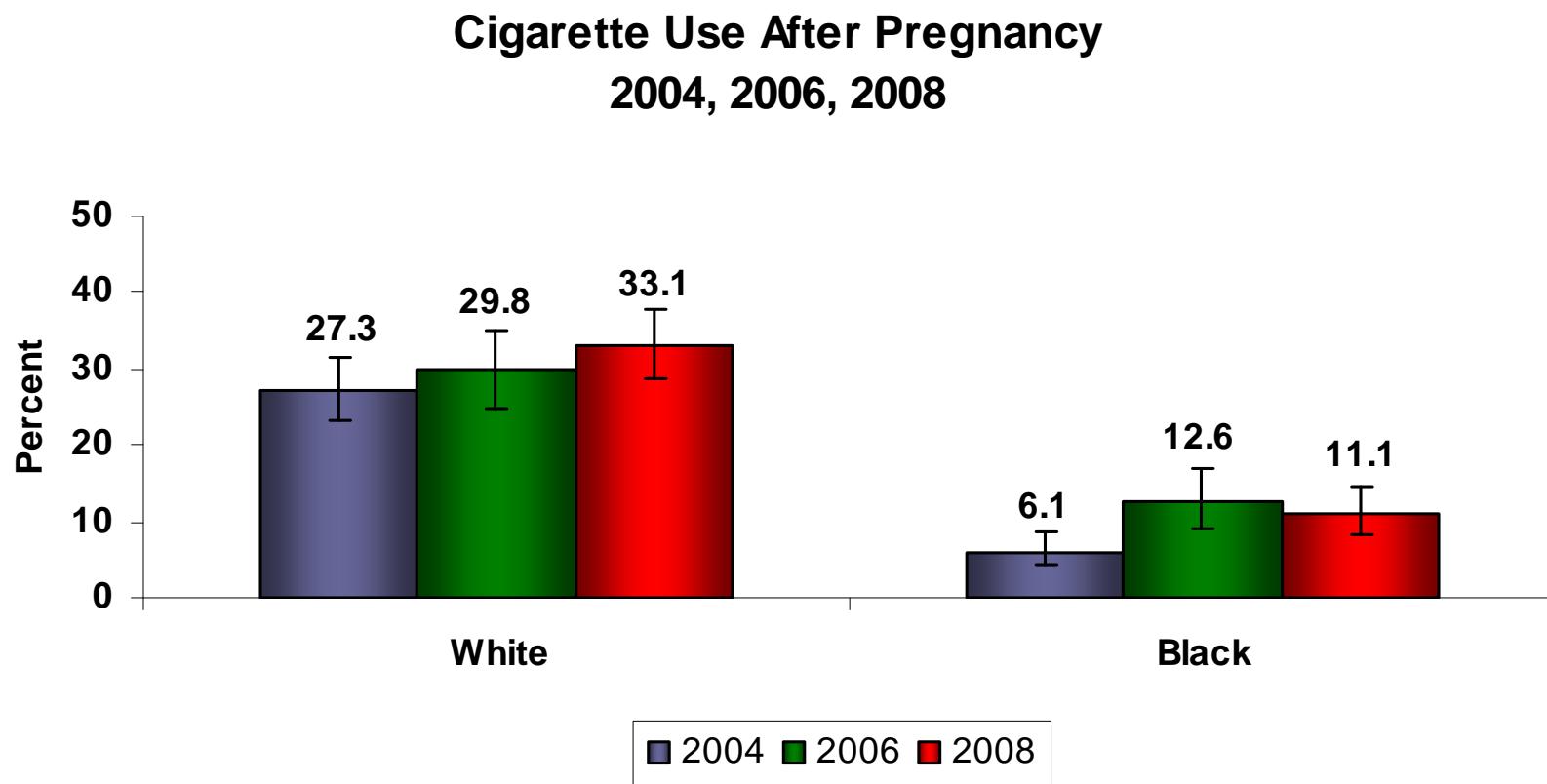
Cigarette Use Before Pregnancy by Race – MS



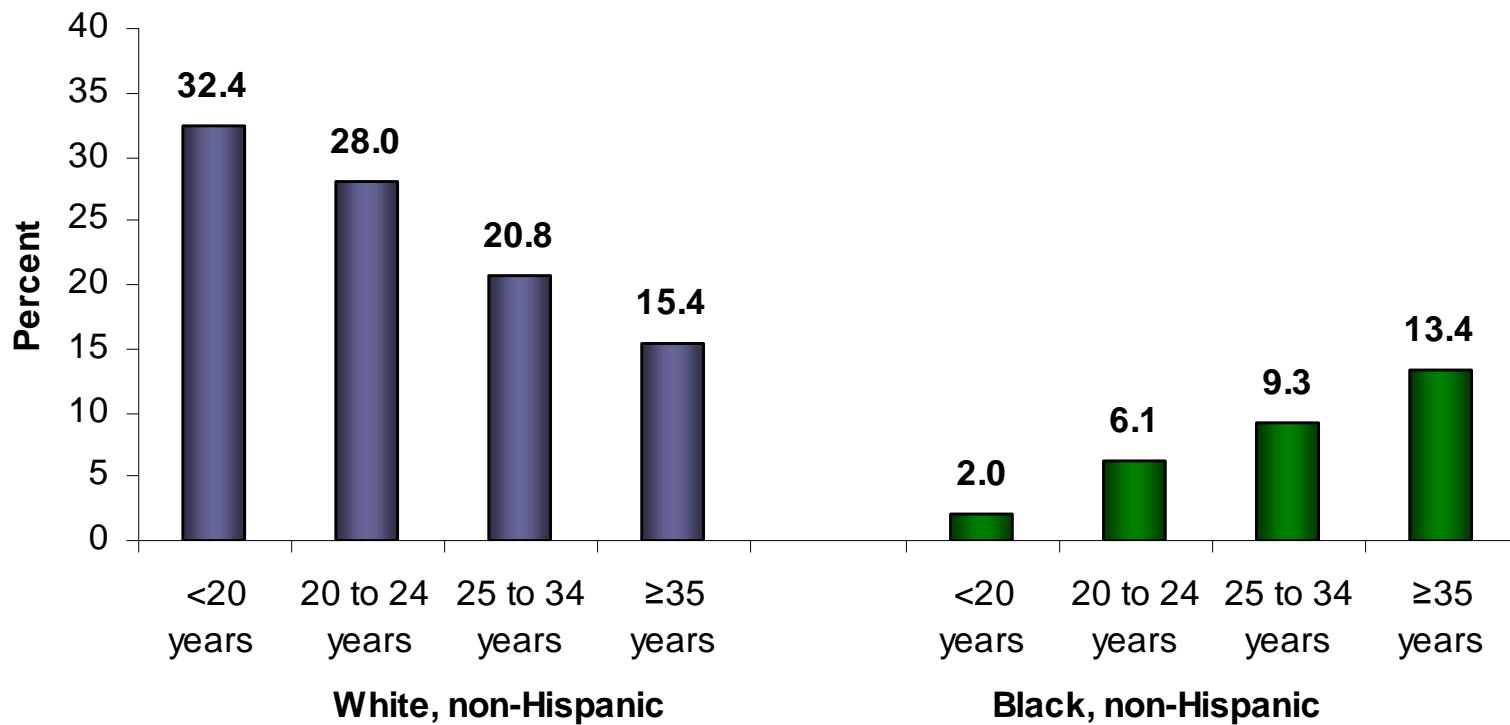
Cigarette Use During Pregnancy by Race – MS



Cigarette Use After Pregnancy by Race – MS



Smoking prevalence during pregnancy by maternal race/ethnicity and age, MS PRAMS 2008



Mississippi, 1996-2003 Birth Cohort

**Adjusted Odds Ratios for Preterm Birth (PTB),
Low Birth Weight and Infant Death by Selected Factors**

| | PTB | LBW | Infant Death |
|---|--------------------------|--------------------------|----------------|
| | OR (95% CI) ^b | OR (95% CI) ^b | OR (95% CI) |
| <u>Maternal Characteristics:</u> | | | |
| Race | | | |
| Black/Non-Hispanic | 1.6 (1.5-1.6) | 2.1 (2.0-2.1) | 1.7 (1.6-1.9) |
| White/Non-Hispanic | 1.0 (referent) | 1.0 (referent) | 1.0 (referent) |
| Age Group (yrs) | | | |
| 11-17 | 1.1 (1.0-1.2) | 1.2 (1.2-1.3) | 1.2 (1.0-1.4) |
| 18-24 | 1.0 (0.9-1.0) | 1.1 (1.0-1.1) | 1.1 (1.0-1.2) |
| 25-34 | 1.0 (referent) | 1.0 (referent) | 1.0 (referent) |
| 35+ | 1.2 (1.2-1.3) | 1.3 (1.2-1.4) | 1.1 (0.9-1.3) |



Mississippi, 1996-2003 Birth Cohort

**Adjusted Odds Ratios for Preterm Birth (PTB),
Low Birth Weight and Infant Death by Selected Factors**

| | PTB OR (95% CI) ^b | LBW OR (95% CI) ^b | Infant Death OR (95% CI) |
|---|--|--|------------------------------------|
| <u>Maternal Characteristics:</u> | | | |
| Education level | | | |
| Less than High School | 1.2 (1.1-1.2) | 1.2 (1.2-1.2) | 1.4 (1.2-1.6) |
| High School | 1.1 (1.1-1.1) | 1.1 (1.1-1.1) | 1.2 (1.1-1.4) |
| College | 1.0 (referent) | 1.0 (referent) | 1.0 (referent) |
| Marital Status | | | |
| Not Married | 1.1 (1.1-1.2) | 1.2 (1.2-1.2) | 1.1 (1.0-1.3) |
| Married | 1.0 (referent) | 1.0 (referent) | 1.0 (referent) |



Mississippi, 1996-2003 Birth Cohort

**Adjusted Odds Ratios for Preterm Birth (PTB),
Low Birth Weight and Infant Death by Selected Factors**

| | PTB | LBW | Infant Death |
|--------------------------------------|--------------------------|--------------------------|---------------------|
| | OR (95% CI) ^b | OR (95% CI) ^b | OR (95% CI) |
| <u>Maternal Risk Factors:</u> | | | |
| Initiation of Prenatal Care | | | |
| 1st Trimester | 1.0 (referent) | 1.0 (referent) | 1.0 (referent) |
| 2nd Trimester | 1.2 (1.2-1.2) | 0.9 (0.9-1.0) | 1.1 (1.0-1.2) |
| 3rd Trimester | 1.1 (1.1-1.2) | 0.8 (0.7-0.9) | 0.9 (0.7-1.1) |
| No care | 2.7 (2.5-2.9) | 2.4 (2.2-2.7) | 3.1 (2.5-3.9) |



Mississippi, 1996-2003 Birth Cohort

**Adjusted Odds Ratios for Preterm Birth (PTB),
Low Birth Weight and Infant Death by Selected Factors**

| | PTB OR (95% CI) ^b | LBW OR (95% CI) ^b | Infant Death OR (95% CI) |
|-------------------------------------|--|--|------------------------------------|
| Maternal Risk Factors: | | | |
| Tobacco use | | | |
| 10+ cigarettes/day | 1.1 (1.1-1.2) | 2.1 (2.0-2.2) | 1.8 (1.5-2.0) |
| 1-9 cigarettes/day | 1.1 (1.0-1.1) | 1.7 (1.6-1.8) | 1.4 (1.2-1.7) |
| None | 1.0 (referent) | 1.0 (referent) | 1.0 (referent) |
| Previous Small Infant | 3.5 (3.3-3.8) | 4.6 (4.3-5.0) | 3.0 (2.4-3.7) |
| Maternal Medical Conditions: | | | |
| Diabetes | 1.2 (1.1-1.3) | 0.8 (0.7-0.9) | 1.4 (1.1-1.7) |
| Hydramnios/Oligohydramnios | 1.8 (1.7-2.0) | 3.1 (2.8-3.4) | 4.4 (3.6-5.3) |



Smoking-Attributable Hospitalization Costs for Infants at Delivery, MS 2004

- Infants of mothers who smoked during pregnancy were more likely to have a longer length of stay in an NICU.
- About 10% of MS infant deaths were attributable to smoking among mothers who smoked during pregnancy.
- In MS, smoking during pregnancy resulted in \$2.6 million of delivery hospitalization costs for infants.
 - -- \$400 per maternal smoker.

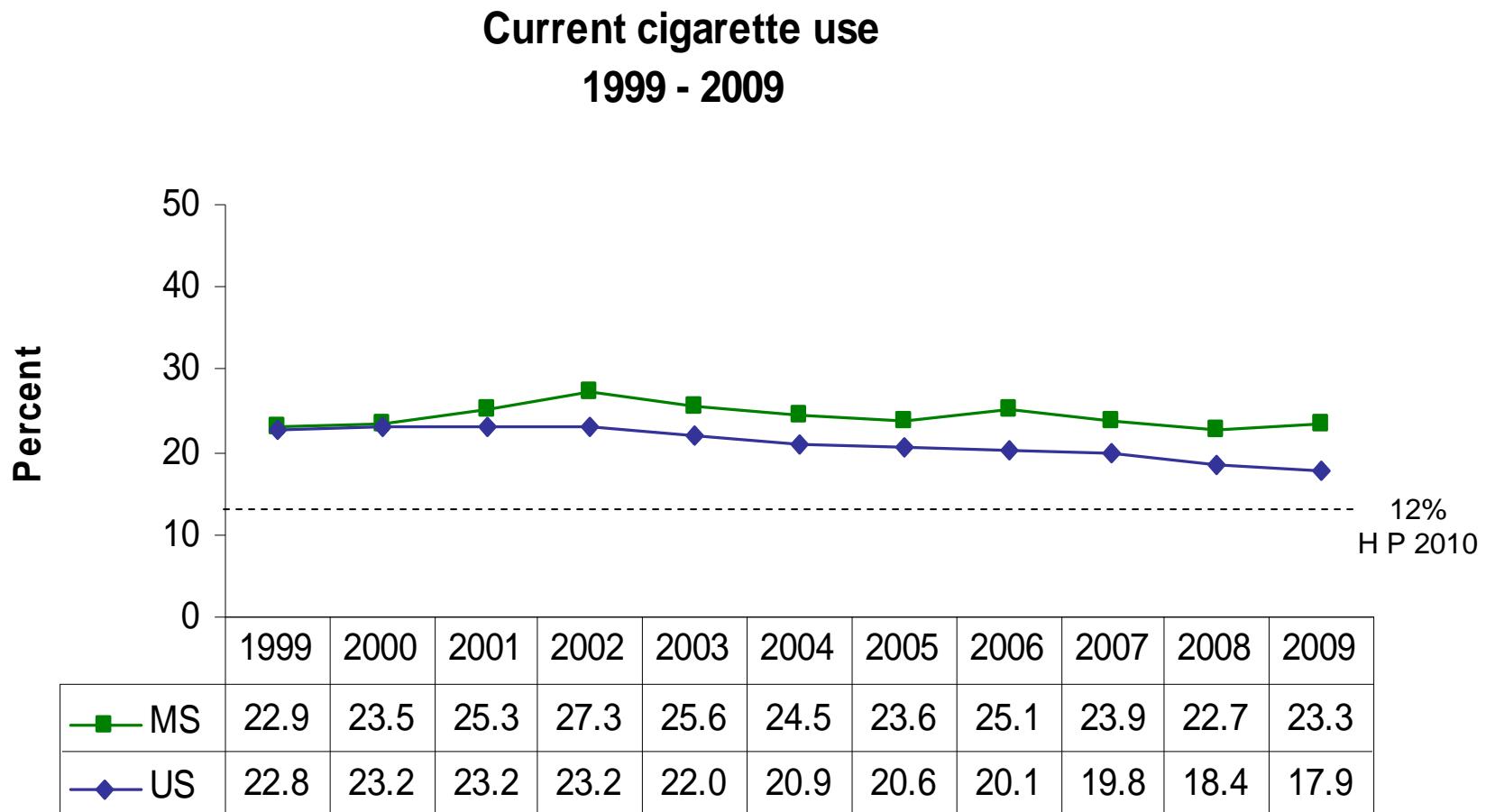
Source: CDC Smoking Attributable Mortality, Morbidity, and Economic Costs,
<http://apps.nccd.cdc.gov/sammec/>

TOBACCO USE AMONG ADULTS

-- Data from BRFSS

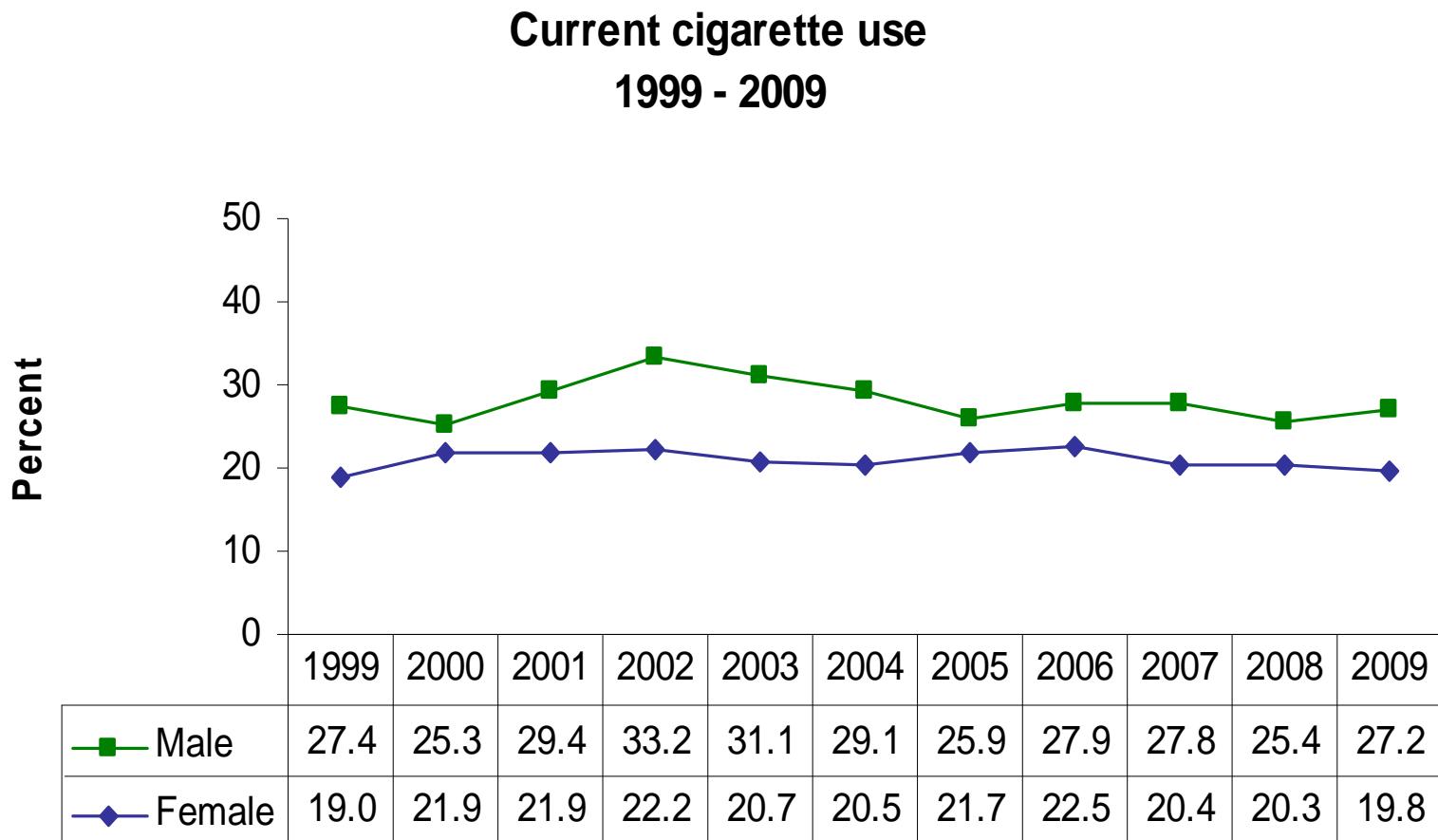


Current Cigarette Use – National Comparison



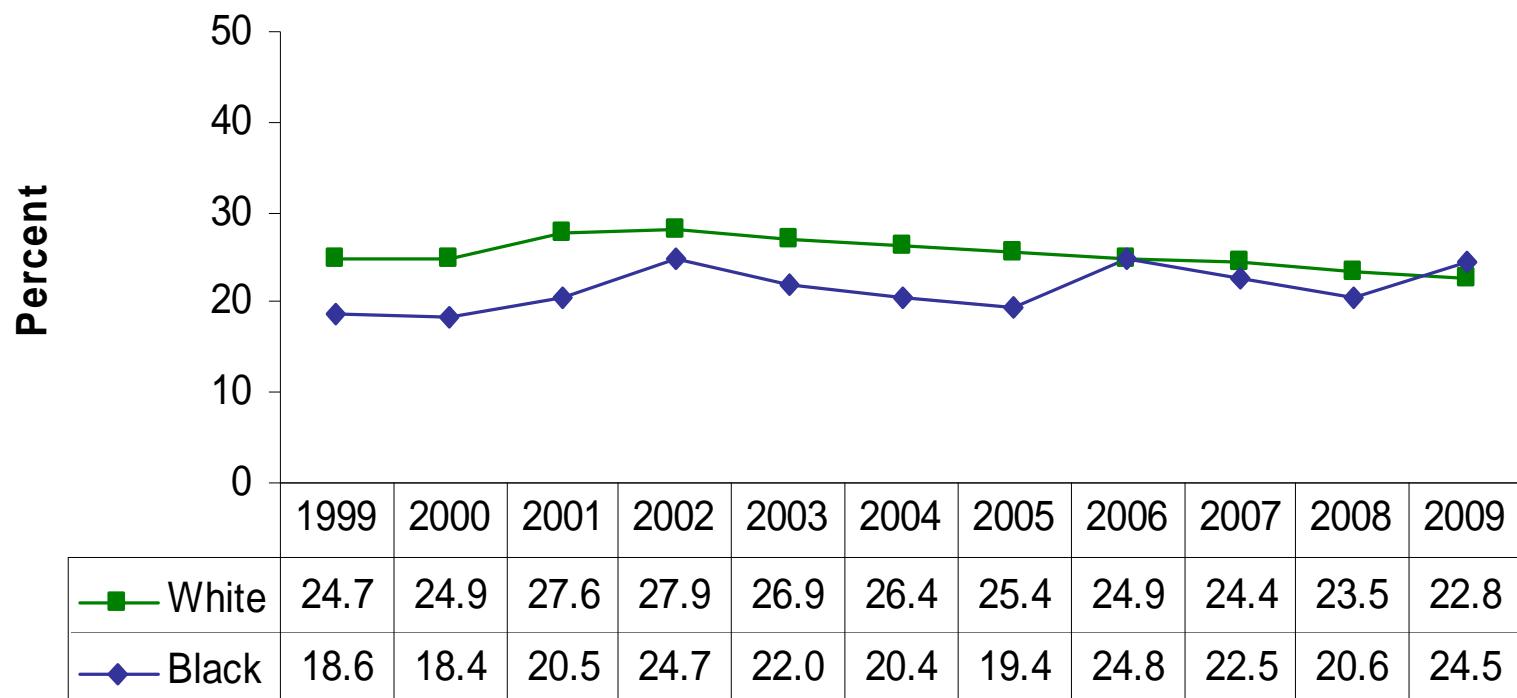
In 2009, Mississippi ranked 3rd highest in the nation. -- Kentucky and West Virginia, 25.6% (1st), Oklahoma, 25.5 (2nd)... Utah, 11.7% (lowest).

Current Cigarette Use by Sex — Mississippi

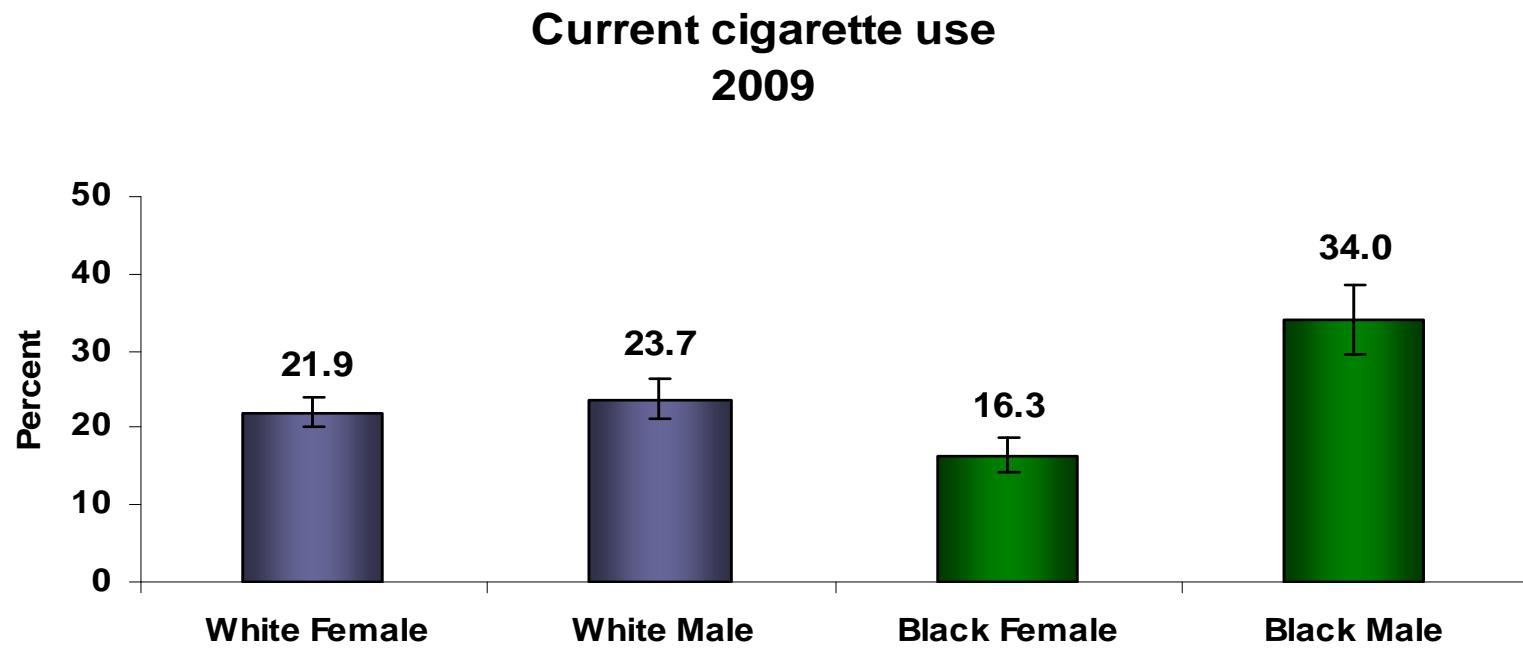


Current Cigarette Use by Race — Mississippi

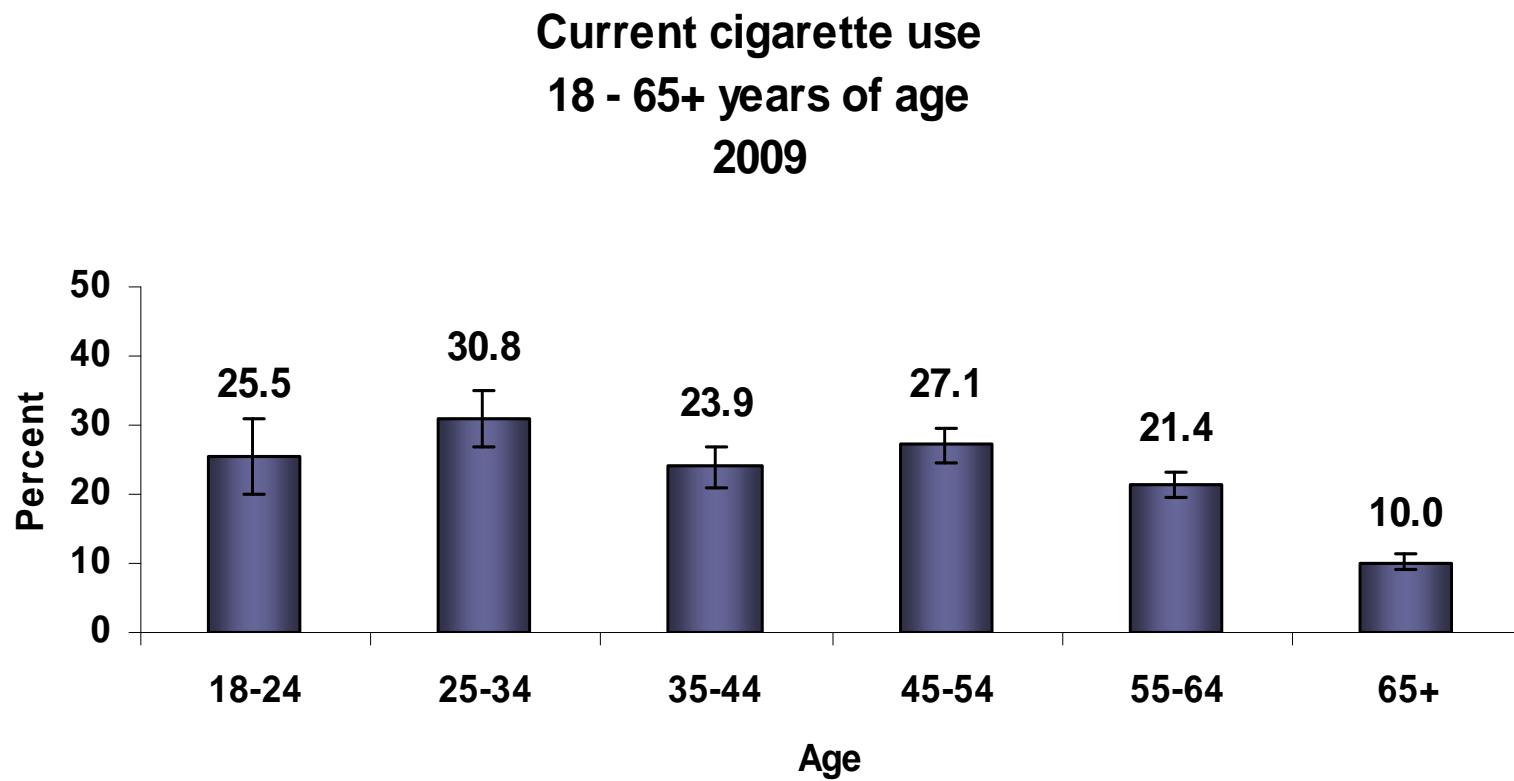
**Current cigarette use
1999 - 2009**



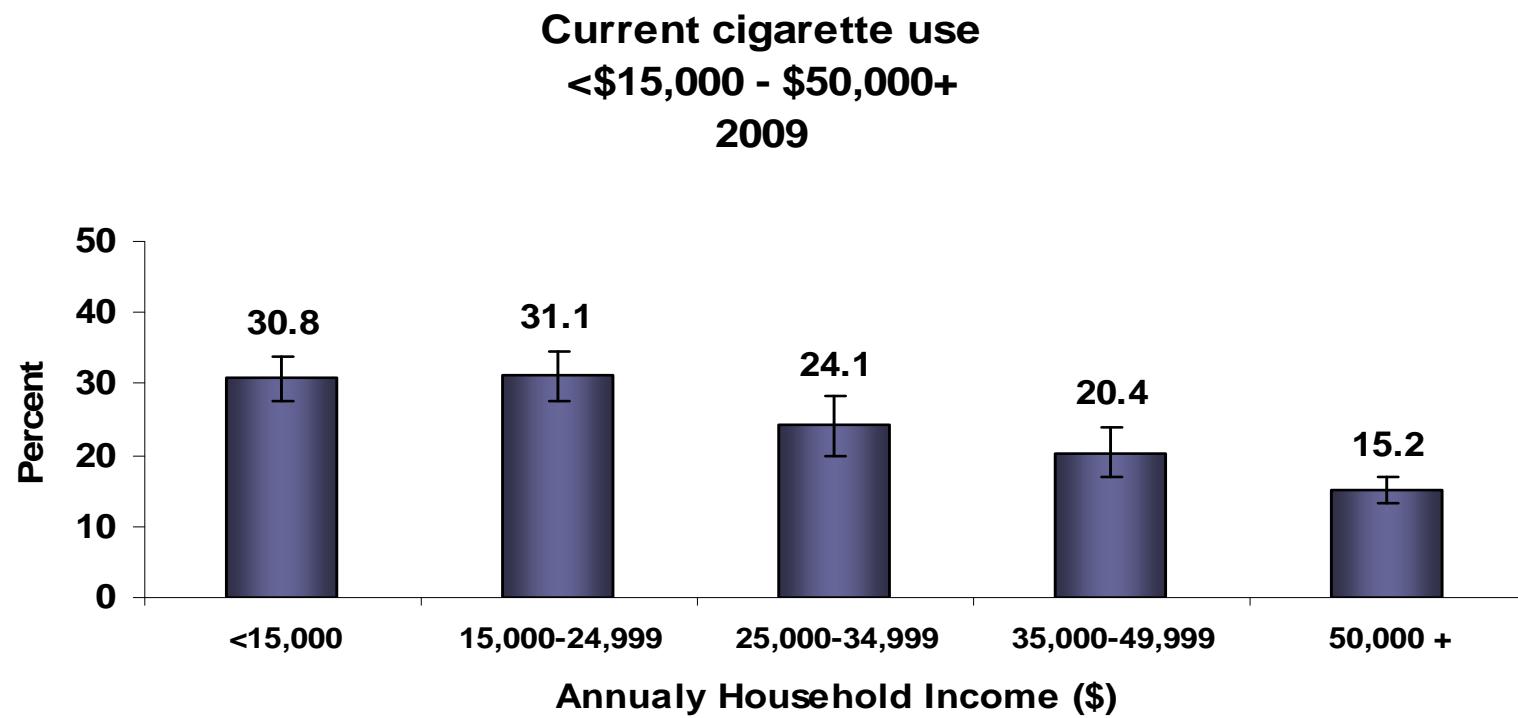
Current Cigarette Use by Race and Sex – MS



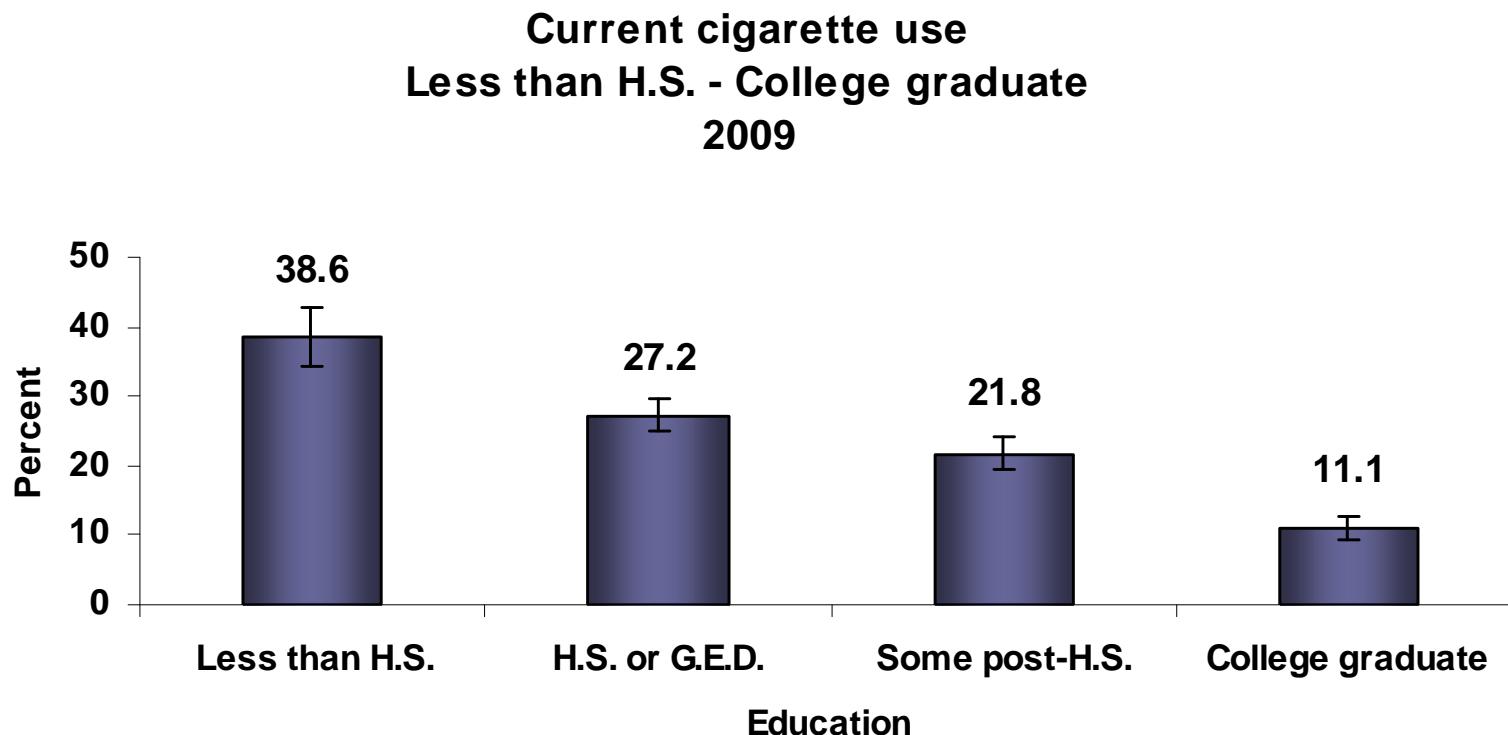
Current Cigarette Use by Age — Mississippi



Current Cigarette Use by Household Income — MS



Current Cigarette Use by Educational Level — MS



2009 Current Cigarette Users — White/Non-Hispanic

| | Odds ratio | Lower 95% confidence limit | Upper 95% confidence limit |
|--------------------|-------------|-------------------------------|-------------------------------|
| Sex | | | |
| Male | 1.11 | 0.91 | 1.36 |
| Female | Referent | Referent | Referent |
| Age (yrs) | | | |
| 18 – 24 | 3.44 | 2.04 | 5.81 |
| 25 – 34 | 9.05 | 6.40 | 12.80 |
| 35 – 44 | 6.38 | 4.68 | 8.69 |
| 45 – 54 | 7.00 | 5.30 | 9.16 |
| 55 – 64 | 4.37 | 3.35 | 5.70 |
| 65 or older | Referent | Referent | Referent |



2009 Current Cigarette Users — White/Non-Hispanic

| | Odds ratio | Lower 95% confidence limit | Upper 95% confidence limit |
|-------------------------|-------------|-------------------------------|-------------------------------|
| Income (\$) | | | |
| Less than 15,000 | 2.20 | 1.58 | 3.07 |
| 15,000 – 24,999 | 2.73 | 2.03 | 3.68 |
| 25,000 – 34,999 | 1.54 | 1.08 | 2.19 |
| 35,000 – 49,999 | 1.37 | 1.03 | 1.82 |
| 65,000 or more | Referent | Referent | Referent |
| Education | | | |
| Less than H.S. | 6.11 | 4.11 | 9.08 |
| H.S. or G.E.D. | 2.65 | 1.99 | 3.52 |
| Some post-H.S. | 2.43 | 1.82 | 3.26 |
| College graduate | Referent | Referent | Referent |



2009 Current Cigarette Users — Black/Non-Hispanic

| | Odds ratio | Lower 95% confidence limit | Upper 95% confidence limit |
|--------------------|-------------|-------------------------------|-------------------------------|
| Sex | | | |
| Male | 2.61 | 1.98 | 3.44 |
| Female | Referent | Referent | Referent |
| Age (yrs) | | | |
| 18 – 24 | 2.18 | 1.15 | 4.12 |
| 25 – 34 | 2.71 | 1.73 | 4.25 |
| 35 – 44 | 2.13 | 1.32 | 3.44 |
| 45 – 54 | 2.67 | 1.80 | 3.97 |
| 55 – 64 | 2.35 | 1.59 | 3.49 |
| 65 or older | Referent | Referent | Referent |



2009 Current Cigarette Users — Black/Non-Hispanic

| | Odds ratio | Lower 95% confidence limit | Upper 95% confidence limit |
|-------------------------|-------------|-------------------------------|-------------------------------|
| Income (\$) | | | |
| Less than 15,000 | 3.33 | 1.95 | 5.69 |
| 15,000 – 24,999 | 2.57 | 1.53 | 4.30 |
| 25,000 – 34,999 | 2.11 | 1.19 | 3.73 |
| 35,000 – 49,999 | 1.82 | 0.93 | 3.57 |
| 65,000 or more | Referent | Referent | Referent |
| Education | | | |
| Less than H.S. | 3.25 | 1.90 | 5.54 |
| H.S. or G.E.D. | 2.59 | 1.62 | 4.15 |
| Some post-H.S. | 1.57 | 0.96 | 2.59 |
| College graduate | Referent | Referent | Referent |



Annual Average Rates

Average Annual Smoking-Attributable Mortality* (SAM), 2000–2004

| | SAM* | SAM Rate† |
|--------------|--------------|------------------|
| Men | 3,125 | 542.1 |
| Women | 1,636 | 193.8 |
| Total | 4,761 | 333.6 |

Note: *Average annual total, among adults aged 35 years and older, and does not include burn or secondhand smoke deaths.

†Age adjusted rate expressed per 100,000 population.

Source: [Smoking-Attributable Mortality, Morbidity, and Economic Costs \(SAMMEC\) program](#)



Question?

For additional information:

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